



Department of Veterans Affairs

SOUTH TEXAS VETERANS HEALTHCARE SYSTEM AUDIE L. MURPHY MEMORIAL VETERANS HOSPITAL 7400 MERTON MINTER BLVD. SAN ANTONIO, TEXAS

REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS PROJECT # 671-11-115

DRAWING INDEX:

GENERAL INFORMATION

GI-001 COVER SHEET
GI-002 GENERAL INFORMATION
GI-003 GENERAL INFORMATION

ASBESTOS ABATEMENT

HA-131 3RD FLOOR PLAN - DEMOLITION AND ABATEMENT PHASING
HA-141 4TH FLOOR PLAN - DEMOLITION AND ABATEMENT PHASING

ARCHITECTURE

AS-431 3RD FLOOR REFLECTED CEILING PLAN
AS-441 4TH FLOOR REFLECTED CEILING PLAN
AS-601 ARCHITECTURAL DETAILS

MECHANICAL

MI-101 MECHANICAL SYMBOLS & ABBREVIATIONS
MI-102 MECHANICAL DETAILS
MI-103 MECHANICAL MECHANICAL SCHEDULES
MD-301 MECHANICAL THIRD FLOOR HVAC
MD-401 MECHANICAL FOURTH FLOOR HVAC
MH-301 MECHANICAL THIRD FLOOR HVAC
MH-401 MECHANICAL FOURTH FLOOR HVAC

ELECTRICAL

E1-101 ELECTRICAL SYMBOLS AND ABBREVIATIONS
E1-102 ELECTRICAL SYMBOLS AND ABBREVIATIONS
E1-103 ELECTRICAL LIGHTING DETAILS
ED-301 ELECTRICAL THIRD FLOOR LIGHTING

ED-401 ELECTRICAL FOURTH FLOOR LIGHTING
EL-301 ELECTRICAL THIRD FLOOR LIGHTING
EL-401 ELECTRICAL FOURTH FLOOR LIGHTING

FIRE PROTECTION

FI-101 FIRE PROTECTION SYMBOLS & ABBREVIATIONS
FD-301 FIRE PROTECTION THIRD FLOOR
FD-401 FIRE PROTECTION FOURTH FLOOR
FA-301 FIRE PROTECTION THIRD FLOOR
FA-401 FIRE PROTECTION FOURTH FLOOR

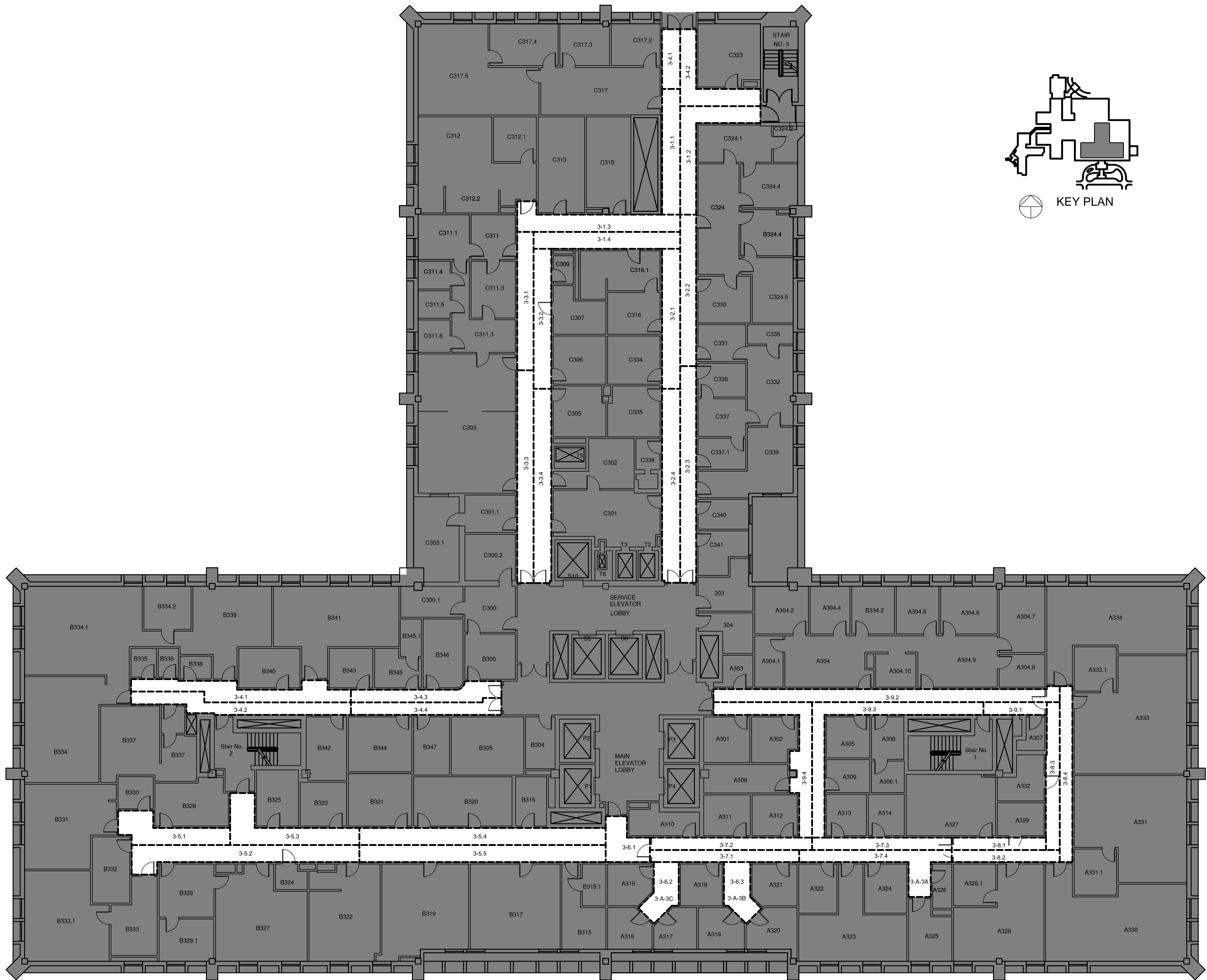
BUILDING IS FULLY SPRINKLED



12 SEPT 2013

		CONSULTANTS:		ARCHITECT/ENGINEERS:		Approved: Assistant Director		Approved: Chief of Staff		Approved: Chief, Engineering		Drawing Title		Project Name		Project Number		<div>Office of Construction and Facilities Management</div> <div> Department of Veterans Affairs</div>	
						Approved: Service Chief		Approved: Service Chief		Approved: Service Chief		COVER SHEET		REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS		671-11-115			
						Approved: Chief, Bio-Med		Approved: Chief, EMS		Approved: Chief, Infection Control		Location				Date			
						Approved: Chief, IT		Approved: Chief, M&O		Approved: Chief, Police		Audie L. Murphy Memorial Veterans Hospital San Antonio Texas				12 SEPT 2013			
Revisions:		Date				Approved: Chief, Safety		Approved: Chief		Approved: Chief		Building Number		Checked		Drawn		Drawing Number	
												1		RHC		CAW/PJ		GI-001	
																		Dwg. 1 of 109	

DISCIPLINE REFERENCES		ARCHITECTURAL FLOOR PLAN SYMBOLS		GENERAL NOTES		DIMENSIONING CONVENTIONS	
DRAWINGS FOR THE FOLLOWING DISCIPLINES ARE CONTAINED IN THE DOCUMENT. THE DISCIPLINES ARE IDENTIFIED BY THE REFERENCE WHICH IS INCORPORATED INTO THE SHEET TITLE.							
REFERENCE	DISCIPLINE						
GI	COVER & GENERAL INFORMATION						
HA	ASBESTOS ABATEMENT						
SS	STRUCTURAL						
AS	ARCHITECTURAL						
AD	ARCHITECTURAL DEMOLITION						
FA	FIRE PROTECTION						
ES	ELECTRICAL						
MS	MECHANICAL						
SHEET NUMBER							
DRAWING ORDER REFERENCE							
SHEET SEQUENCE NOTATION							
C-2							
DRAWING NUMBERING							
B1 BUILDING SECTION							
1/4" = 1'-0"							
REF. F1/AS-101							
EACH DRAWING IS NUMBERED ACCORDING TO ITS LOCATION ON THE SHEET. THE DRAWING TITLE APPEARS ABOVE THE DEMARCATION LINE AND, WHERE APPROPRIATE THE SCALE IS LOCATED BELOW THE DEMARCATION LINE IN THE LOWER LEFT-HAND QUADRANT OF THE KEY. THE DRAWING CAN BE REFERENCED BACK TO IT'S ORIGINAL SHEET AND DRAWING BY THE DRAWING REFERENCE LOCATION IN THE LOWER RIGHT-HAND QUADRANT.							
DRAWING REFERENCE							
REF. 1/AS-101							
SHEET NUMBER							
DRAWING NUMBER ON SHEET BY LOCATION							
REFERENCE							
ARCHITECTURAL REFLECTED CEILING PLAN SYMBOLS							
ARCHITECTURAL							
(ACT-1). ARMSTRONG 895 2'X4' SQUARE EDGE W/ ARMSTRONG ML 15/16" EXPOSED TEE SYSTEM (WHITE)							
(ACT-2). ARMSTRONG 896 2'X2' SQUARE EDGE W/ ARMSTRONG ML 15/16" EXPOSED TEE SYSTEM (WHITE)							
(ACT-3). WASHABLE ARMSTRONG 2'X4' SQUARE EDGE W ARMSTRONG ML 15/16" EXPOSED TEE SYSTEM (WHITE) USE IN THE FOLLOWING LOCATIONS: CORRIDOR 202, CORRIDOR 204, CORRIDOR 205, CORRIDOR 206, CORRIDOR 207, CORRIDOR 208, CORRIDOR 209							
GYPSUM BOARD, PAINTED GLIDDEN PROFESSIONAL LIFEMASTER NO VOC, 30YY 71/138 ORDER #A0091, SEMI-GLOSS LATEX ENAMEL							
MECHANICAL							
SUPPLY GRILLE							
RETURN GRILLE							
EXHAUST GRILLE							
ELECTRICAL							
2'X4' FLUORESCENT FIXTURE							
2'X2' FLUORESCENT FIXTURE							
RECESSED FLUORESCENT CAN LIGHT -REF, M.E.P. FOR ADDITIONAL NOTES.							
CEILING MOUNTED EXIT SIGN, SINGLE-SIDED							
CEILING MOUNTED EXIT SIGN, DOUBLE-SIDED							
CEILING MOUNTED NURSE CALL LIGHT							
CEILING MOUNTED SMOKE DETECTOR							
CEILING MOUNTED 10" SPEAKER							
CEILING MOUNTED TELEMETRIC DEVICE							
CEILING MOUNTED CLOSED CIRCUIT CAMERA							
DECONTAMINATION SHOWER							
CEILING MOUNTED FIRE SPRINKLER							
CEILING MOUNTED 2' DIA. 90 DEGREE MIRROR							
CEILING MOUNTED 2' DIA. 180 DEGREE MIRROR							
CEILING MOUNTED 2' DIA. 360 DEGREE MIRROR							
CEILING MOUNTED SIGN							
CONSULTANTS:							
Goetting & Associates							
Raba Kistner							
ARCHITECT/ENGINEERS:							
COX DESIGN ASSOCIATES							
ARCHITECTURE PLANNING INTERIORS							
Austin 5121 Bee Cave Road, Suite 203 345 N. Canal St. Suite 701 Chicago, IL 60605							
T:312 - 327 - 4349 F:312 - 327 - 7679 coxdesign@austin.tx.com							
Approved: Assistant Director							
Approved: Chief of Staff							
Approved: Chief, Engineering							
Approved: Service Chief							
Approved: Chief, Bio-Med							
Approved: Chief, IT							
Approved: Chief, Safety							
Drawing Title							
GENERAL INFORMATION							
Location							
Audie L. Murphy Memorial Veterans Hospital San Antonio Texas							
Project Name							
REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS							
Project Number							
671-11-115							
Date							
4 FEB 2011							
Drawing Number							
GI-002							
Building Number							
1							
Checked							
RHC							
Drawn							
CAW/PJ							
Dwg. 2 of 109							
Office of Construction and Facilities Management							
Department of Veterans Affairs							



ABATEMENT GRAPHICAL LEGEND

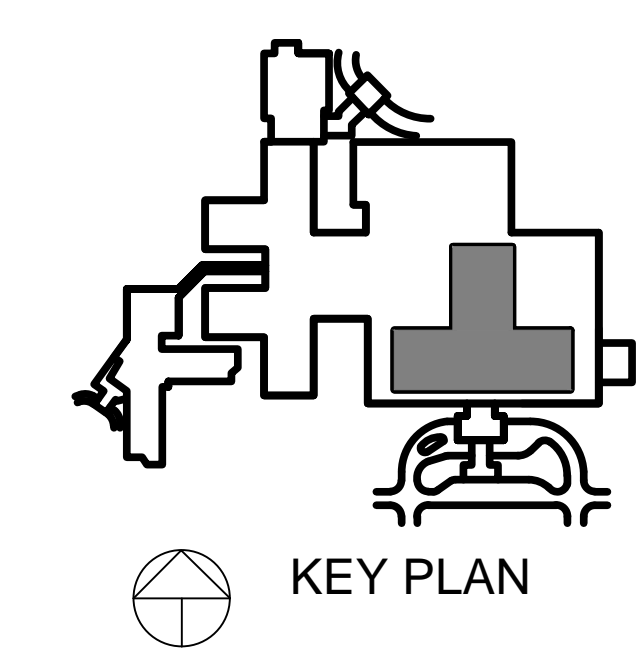
- ASBESTOS ABATEMENT PHASE / CONSTRUCTION BARRIERS
- ABATEMENT PART DESIGNATION
- ABATEMENT PHASE
- FLOOR LEVEL
- AREA NOT IN CONTRACT

ABATEMENT NOTES

- IN THE EVENT THE ASBESTOS CONTRACTOR DISCOVERS A CONFLICT IN THE CONTRACT DOCUMENTS AND/OR REQUIREMENTS OR CODES, THE CONFLICT MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTING OFFICER FOR RESOLUTION.
- ABATEMENT ACTIVITIES INCLUDE REMOVAL CLEAN-UP AND DISPOSAL OF ACM CONTAINING LAY-IN CEILING TILE WASTE HAULING, RECORDKEEPING, SECURITY, MONITORING AND INSPECTIONS.
- WORK HOURS WILL BE FROM 1800 HRS TO 0600 HRS MONDAY-FRIDAY EXCLUDING FEDERAL HOLIDAYS. ANY CHANGE IN THE WORK SCHEDULE MUST BE APPROVED IN WRITING BY THE VA REPRESENTATIVE.
- CONTRACTOR MUST LEAVE A MINIMUM OF HALF OF THE ELEVATORS AND LOBBY ACCESSIBLE AT ALL TIMES.
- CONTRACTOR MUST LEAVE A MINIMUM OF 48" OF ANY EXISTING HALLWAY ACCESSIBLE TO HOSPITAL PERSONNEL AT ALL TIMES.
- CONTRACTOR MUST COVER THE REGULATED AREA WITH TWO LAYERS OF 6 MIL FIRE RETARDANT POLY O THE FLOORS AND TWO LAYERS OF 4 MIL FIRE RETARDANT POLY ON THE WALLS.
- THE ABATEMENT AREA WILL BE LESS THAN 260SQ/160LF.
- WORK IN THE REGULATED AREA IS COMPLETE WHEN THE REGULATED AREA IS VISUALLY CLEAN AND AIRBORNE FIBER LEVELS HAVE BEEN REDUCED TO OR BELOW 0.01 FCC A MEASURED WITH PCM METHOD.
- THE NUMBERING OF THE ABATEMENT PHASES IS ONLY FOR IDENTIFYING AREAS OF THE BUILDING AND DOES NOT SUGGEST A SEQUENCE OF WORK. THE WORK MAY BE PURSUED AN ANY SEQUENCE.

1 3RD FLOOR PLAN - DEMOLITION AND ABATEMENT PHASING
1/8" = 1'-0"

CONSULTANTS:		ARCHITECT/ENGINEERS:		Approved: Assistant Director			Approved: Chief of Staff			Approved: Chief, Engineering			Drawing Title			Project Name			Project Number			Office of Construction and Facilities Management Department of Veterans Affairs		
Goetting & Associates		COX DESIGN ASSOCIATES		Approved: Service Chief			Approved: Service Chief			Approved: Service Chief			3RD FLOOR PLAN - DEMOLITION AND ABATEMENT PHASING			REPLACE CEILING & LIGHTING			671-08-126					
Raba Kistner		ARCHITECTURE PLANNING INTERIORS		Approved: Chief, Bio-Med			Approved: Chief, EMS			Approved: Chief, Infection Control			Location			Checked			Date					
Revisions:		Austin 5121 Bee Caves Road, Suite 203 Austin, Texas 78746 T:312 - 327 - 4149 F:312 - 327 - 7679 coxdesign@austin.tx.com		Chicago 345 N. Canal St. Suite 701 Chicago, IL 60605 T:312 - 454 - 9434 F:312 - 454 - 9439			Approved: Chief, IT			Approved: Chief, M&O			Approved: Chief, Police			AUDIE L. MURPHY MEMORIAL VETERANS HOSPITAL SAN ANTONIO, TEXAS			Drawing Number			HA-131		
Date		TBPE Firm F-3257					Approved: Chief, Safety			Approved: Chief			Approved: Chief			Building Number			Dwg. 7 of 109					



EXPANSION JOINT KEY

NOTE: EXPANSION JOINTS TO BE CONTINUOUS AT WALL LOCATIONS WHERE SHOWN ON FLOOR AND CEILING PLANS

EJ =EXPANSION JOINT
CEILING EXPANSION JOINT=RE. DETAIL 4/AS-601

ARCHITECTURAL GRAPHICAL LEGEND

EXISTING TO REMAIN
DEDUCTIVE ALTERNATE AREA

RCP NOTES:

SHEET NOTES:

- A. REFER TO ELECTRICAL DRAWINGS, FIRE PROTECTION, AND MECHANICAL DRAWING SERIES, FOR COORDINATION OF ALL ELECTRICAL ITEMS SHOWN IN CEILING PLAN.
- B. TYPICAL HOSPITAL CEILINGS TO BE 9'-4" A.F.F., U.O.N.
- C. COMMUNICATION DEVICES, SPRINKLER HEADS, AND CEILING MOUNTED EQUIPMENT TO BE LOCATED NO LESS THAN 6 INCHES FROM THE NEAREST EDGE OF CEILING GRID U.O.N.
- D. CEILING GRIDS TO BE CENTERED IN ROOMS, U.O.N.
- F. IN CASE OF DISCREPANCIES IN LOCATIONS OF COMPONENTS WITH ELECTRICAL OR MECHANICAL DRAWINGS, THE ARCHITECTURAL REFLECTED CEILING PLAN SHALL GOVERN.
- G. ACCESS PANELS TO BE PAINTED TO MATCH ADJACENT CEILING FINISH U.O.N., GLIDDEN PROFESSIONAL, DEVFLEX 4216, 30YY 71/138, FLAXEN WHITE, SEMI-GLOSS LATEX ENAMEL
- H. FOR ARCHITECTURAL GENERAL NOTES, ABBREVIATIONS SYMBOLS, DIMENSIONING CONVENTIONS REFER TO SHEET GI-002 & GI-003
- I. FOR ARCHITECTURAL MATERIAL DESIGNATIONS REFER TO SHEET GI-002
- J. ALL EXISTING CEILING ASSEMBLIES TO BE REMOVED ARE ACT ASSEMBLIES U.O.N.
- K. FOR ELECTRICAL FIXTURE SCHEDULE AND CIRCUITING REFER TO ELECTRICAL DRAWINGS.
- L. EXISTING CEILING IN CORRIDOR 001 IS GYP BD ASSEMBLY
- M. COMMUNICATION DEVICES AND CEILING MOUNTED EQUIPMENT TO BE CENTERED IN CEILING TILE, U.O.N.
- N. REFER TO MECHANICAL DRAWINGS, MH FOR COORDINATION OF ALL MECHANICAL ITEMS SHOWN IN CEILING PLAN.
- O. CEILING GRID ALIGNMENT TO BE REVIEWED BY RESIDENT ENGINEER
- P. REFER TO SHEET AS-601 FOR TYPICAL EXPANSION JOINT AND CEILING DETAILS.

ARCHITECTURAL REFLECTED CEILING PLAN SYMBOLS

ARCHITECTURAL

- (ACT-1), ARMSTRONG 895 2'X4' SQUARE EDGE W/ ARMSTRONG ML 15/16" EXPOSED TEE SYSTEM (WHITE)
- (ACT-2), ARMSTRONG 896 2'X2' SQUARE EDGE W/ ARMSTRONG ML 15/16" EXPOSED TEE SYSTEM (WHITE)
- (ACT-3), WASHABLE ARMSTRONG 2'X4' SQUARE EDGE W ARMSTRONG ML 15/16" EXPOSED TEE SYSTEM (WHITE) USE IN THE FOLLOWING LOCATIONS: CORRIDOR 202, CORRIDOR 204, CORRIDOR 205, CORRIDOR 206, CORRIDOR 207, CORRIDOR 208, CORRIDOR 209
- GYPSUM BOARD, PAINTED GLIDDEN PROFESSIONAL LIFEMASTER NO VOC, 30YY 71/138 ORDER #A0091, SEMI-GLOSS LATEX ENAMEL

MECHANICAL

- SUPPLY GRILLE
RETURN GRILLE
EXHAUST GRILLE

ELECTRICAL

- 2'X4' FLUORESCENT FIXTURE
2'X2' FLUORESCENT FIXTURE
RECESSED FLUORESCENT CAN LIGHT - REF, M.E.P. FOR ADDITIONAL NOTES.
CEILING MOUNTED EXIT SIGN, SINGLE-SIDED
CEILING MOUNTED EXIT SIGN, DOUBLE-SIDED
CEILING MOUNTED NURSE CALL LIGHT
CEILING MOUNTED SMOKE DETECTOR
CEILING MOUNTED 10" SPEAKER
CEILING MOUNTED TELEMETRIC DEVICE
CEILING MOUNTED CLOSED CIRCUIT CAMERA
DECONTAMINATION SHOWER
CEILING MOUNTED FIRE SPRINKLER
CEILING MOUNTED 2' DIA. 90 DEGREE MIRROR
CEILING MOUNTED 2' DIA. 180 DEGREE MIRROR
CEILING MOUNTED 2' DIA. 360 DEGREE MIRROR
CEILING MOUNTED SIGN

2 4TH FLOOR REFLECTED CEILING PLAN - NORTH
1/8" = 1'-0"

BUILDING IS FULLY SPRINKLED

1 4TH FLOOR REFLECTED CEILING PLAN - SOUTH
1/8" = 1'-0"

CONSULTANTS:



ARCHITECT/ENGINEERS:

COX DESIGN ASSOCIATES

ARCHITECTURE PLANNING INTERIORS
Austin 5121 Bee Cave Road, Suite 203 Chicago 345 N. Canal St. Suite 701
Austin, Texas 78746 Chicago, IL 60605
T:312 - 327 - 4149 T:312 - 454 - 9434
F:312 - 327 - 7679 F:312 - 454 - 9439
coxdesign@austin.tx.com

Approved: Assistant Director	Approved: Chief of Staff	Approved: Chief, Engineering
Approved: Service Chief	Approved: Service Chief	Approved: Service Chief
Approved: Chief, Bio-Med	Approved: Chief, EMS	Approved: Chief, Infection Control
Approved: Chief, IT	Approved: Chief, MAO	Approved: Chief, Police
Approved: Chief, Safety	Approved: Chief	Approved: Chief

Drawing Title
4TH FLOOR REFLECTED CEILING PLAN

Location
Audie L. Murphy Memorial Veterans Hospital
San Antonio Texas

Project Name
REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS

Building Number
1

Checked
RHC

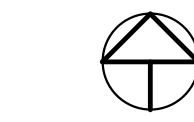
Drawn
CAW/PJ

Project Number
671-11-115

Date
4 FEB 2011

Drawing Number
AS-441

Dwg. 21 of 109



Office of
Construction
and Facilities
Management





BUILDING IS FULLY SPRINKLED

[illegible]

MECHANICAL SYMBOLS & ABBREVIATIONS

ABBREVIATIONS

ACC	AIR COOLED DX CONDENSER
ACCU	AIR COOLED CONDENSING UNIT
ACRU	AIR COOLED RECIP. CHILLER UNIT
AD	ACCESS DOOR
AF	AFTER FILTER
AFF	ABOVE FINISHED FLOOR
AFW	AIR FOIL WHEEL
AFCV	AIR FLOW CONTROL VALVE
AFM	AIR FLOW MEASURING DEVICE
AH	AIR HANDLING UNIT
AP	ACCESS PANEL
BIW	BACKWARD INCLINED WHEEL CONVERTOR
C	COOLING COIL
CH	CENTRIFUGAL OR HELICAL ROTARY SCREW CHILLER UNIT
CHP	CHILLED WATER PUMP
CD	CEILING DIFFUSER
CF	CENTRIFUGAL FAN
CG	CEILING GRILLE
CO	CLEAN OUT
COMP.	COMPRESSOR UNIT
CP	CONDENSATE PUMP
CT	COOLING TOWER
CW	COLD WATER
CWP	CONDENSER WATER PUMP
D	AUTOMATIC CONTROL DAMPER
Db	DRY BULB TEMPERATURE, °F
dB	DECIBELS
DCP	DISTRIBUTED CONTROL PANEL
DFA	DROP FROM ABOVE
Dp	DEW POINT TEMPERATURE, °F
DTB	DROP TO BELOW
DPT	DIFFERENTIAL PRESSURE TRANSMITTER
E/A	EXHAUST AIR
ECC	ENGINEERING CONTROL CENTER
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EH	ENTRANCE HEATER
EMD	END OF MAIN DRIP (STEAM)
EOL	END OF LINE
ET	EXPANSION TANK
EX.	EXISTING
F&T	FLOAT AND THERMOSTATIC TRAP
FC	FAN COIL UNIT
FLR.	FLOOR
FD	FLOOR DRAIN
F.DPR.	FIRE DAMPER
HC	HEATING COIL
HD	HOOD
HP	HORSEPOWER
HPR	HIGH PRESSURE CONDENSATE RETURN
HPS	HIGH PRESSURE (60 PSIG & ABOVE)
HWP	HOT WATER PUMP
ICF	IN-LINE CENTRIFUGAL FAN
LC	LIQUID COOLER
LCD	LINEAR CEILING DIFFUSER
LCP	LABORATORY CONTROL PANEL
LEF	LABORATORY EXHAUST FAN
LEV	LABORATORY EXHAUST VALVE
LPR	LOW PRESSURE STEAM CONDENSATE RETURN
LPS	LOW PRESSURE STEAM (15 PSIG & BELOW)
LTCP	LOCAL TEMPERATURE CONTROL PANEL
LB/HR	POUNDS PER HOUR
MAU	MAKE-UP AIR UNIT
MB	MIXING BOX
MPR	MEDIUM PRESSURE CONDENSATE RETURN
MPS ()	MEDIUM PRESSURE STEAM (16 PSIG THRU 59 PSIG)
MAX.	MAXIMUM
MIN.	MINIMUM
NOM.	NOMINAL
O/A	OUTSIDE AIR
OBD	OPPOSED BLADE DAMPER
P	PUMP
PD	PRESSURE DROP (FEET OF WATER)
PF	PRE-FILTER
PH	PREHEAT
PRV	PRESSURE REDUCING VALVE
R/A	RETURN AIR
REV	ROOF EXHAUST VENT
RF	RETURN AIR FAN
RFB	RISE FROM BELOW
RH	REHEAT COIL
Rh	RELATIVE HUMIDITY
RTA	RISE TO ABOVE
RTU	ROOF TOP UNIT
RV	RELIEF VALVE
S/A	SUPPLY AIR
SA	SOUND ATTENUATING UNIT
SCD	SMOKE CONTROL DAMPER
S.DPR.	SMOKE DAMPER
SF	SUPPLY FAN
Sp.Gr.	SPECIFIC GRAVITY
SH	STEAM HUMIDIFIER
SP	STATIC PRESSURE (INCHES OF WATER)
SPS	STATIC PRESSURE SENSOR
SS	STAINLESS STEEL
SV	SAFETY VALVE
SWHX	STEAM TO WATER HEAT EXCHANGER

ABBREVIATIONS

UH	UNIT HEATER
V	VALVE
VAF	VANE AXIAL FAN
VCC	VOLUMETRIC CONTROL DAMPER
VD	VOLUME DAMPER (MANUAL OPPOSED BLADE)
VE	VOLUME EXTRACTOR
VSMC	VARIABLE SPEED MOTOR CONTROLLER
Wb	WET BULB TEMPERATURE, °F
WF	WATER FILTER
WFM	WATER FLOW MEASURING DEVICE

PIPING SYMBOLS

HEATING

	HIGH PRESSURE STEAM (60 PSIG AND ABOVE)
	MEDIUM PRESSURE STEAM (16 PSIG THRU 59 PSIG)
	LOW PRESSURE STEAM (15 PSIG AND BELOW)
	HIGH PRESSURE CONDENSATE RETURN
	MEDIUM PRESSURE CONDENSATE RETURN
	LOW PRESSURE CONDENSATE RETURN
	EXISTING PIPING
	PUMP CONDENSATE RETURN
	HOT WATER HEATING SUPPLY
	HOT WATER HEATING RETURN
	VENT LINE
	STEAM VENT

AIR CONDITIONING

	CHILLED WATER SUPPLY
	CHILLED WATER RETURN
	MAKE-UP WATER
	DRAIN LINE
	CONDENSER WATER SUPPLY
	CONDENSER WATER RETURN
	REFRIGERANT LIQUID
	REFRIGERANT HOT GAS
	REFRIGERANT SUCTION

GENERAL

	DIRECTION OF PIPE PITCH (DOWN)
	DIRECTION OF FLOW
	ANCHOR
	REDUCER OR INCREASER
	ECCENTRIC REDUCER
	TOP CONNECTION, 45° OR 90°
	BOTTOM CONNECTION, 45° OR 90°
	SIDE CONNECTION
	RISE OR DROP IN PIPE
	UNION
	POINT OF CONNECTION BETWEEN NEW AND EXISTING WORK
	FLOAT AND THERMOSTATIC TRAP SET INCLUDING PIPING ACCESSORIES
	STEAM TRAP
	STRAINER
	THERMOMETER
	PRESSURE GAUGE
	WATER FLOW MEASURING DEVICE
	EXISTING PIPING TO BE REMOVED
	FLOOR DRAIN
	FLEXIBLE PIPE CONNECTORS

PIPING SYMBOLS

VALVES

	GATE VALVE
	GLOBE VALVE
	CHECK VALVE
	BALANCING VALVE
	PRESSURE REDUCING VALVE
	STRAIGHT-THRU MODULATING CONTROL VALVE
	THREE-WAY MODULATING CONTROL VALVE
	SAFETY VALVE OR PRESSURE RELIEF
	MANUAL AIR VENT
	BUTTERFLY VALVE
	BALL VALVE
	GATE VALVE WITH ADAPTER TO 3/4" HOSE THREAD
	ANGLE GATE VALVE
	ANGLE GLOBE VALVE
	TEST PLUG (PRESSURE/TEMPERATURE)
	STEAM HUMIDIFIER
	PIPE SLEEVE

CONTROLS

	ROOM SENSOR: TEMPERATURE, HUMIDITY
	SMOKE DETECTOR (SEE ELECTRICAL SPECIFICATIONS)
	PIPE FLOW SWITCH
	FLOW TRANSMITTER
	PIPE PRESSURE SWITCH
	PIPE DIFFERENTIAL PRESSURE SENSOR
	PIPE PRESSURE SENSOR
	SIGNAL TO DISTRIBUTED CONTROL PANEL (DCP)
	SIGNAL FROM DISTRIBUTED CONTROL PANEL (DCP)
	SIGNAL TO AND FROM DCP
	STATIC PRESSURE SENSOR
	VALVE WITH ELECTRONIC ACTUATOR
	VALVE WITH PNEUMATIC ACTUATOR

NOTICE:
FOR ADDITIONAL CONTROL SYMBOLS AND ABBREVIATIONS
REF. 205-H09.01

EQUIPMENT SYMBOLS

	SPRING ISOLATOR - PIPE OR EQUIPMENT
	VIBRATION ISOLATOR
	NEW EQUIPMENT (HVAC)
	EQUIPMENT (NON-HVAC)
	PUMP
	CENTRIFUGAL FAN
	ROOF VENTILATOR, INTAKE
	ROOF VENTILATOR, EXHAUST
	DOUBLE DUCT TERMINAL UNIT

DUCTWORK SYMBOLS

	SUPPLY DUCT (UP & DOWN)
	EXHAUST DUCT (UP & DOWN)
	RETURN AIR DUCT (UP & DOWN)
	CEILING DIFFUSERS
	SUPPLY TOP REGISTER (WALL TYPE)
	EXHAUST CEILING REGISTER OR GRILLE
	EXHAUST BOTTOM REGISTER OR GRILLE (WALL TYPE)
	RETURN AIR CEILING REGISTER OR GRILLE
	RETURN AIR BOTTOM REGISTER OR GRILLE (WALL TYPE)
	CONNECT NEW DUCT TO EXISTING DUCT
	INCLINED RISE IN DIRECTION OF ARROW
	INCLINED DROP IN DIRECTION OF ARROW
	FLEXIBLE CONNECTION
	VANED ELBOW (PROVIDE ALL SQUARE OR RECTANGULAR ELBOWS WITH VANES EVEN IF SYMBOL IS MISSING)
	STATIC PRESSURE SENSOR
	STANDARD RADIUS ELBOW
	NEW DUCT - WIDTH X DEPTH
	EXISTING DUCT TO REMAIN
	EXISTING DUCTWORK TO BE REMOVED
	LOUVER
	FLEXIBLE DUCTWORK (INSULATED)
	MANUAL VOLUME DAMPER
	FIRE DAMPER
	SMOKE DAMPER
	UNIT HEATER (HORIZONTAL)
	MOTORIZED DAMPER
	DUCT HUMIDIFIER

DRAWING SYMBOLS

	DETAIL NUMBER
	DRAWING NUMBER WHERE DRAWN
	SECTION NUMBER
	DRAWING NUMBER WHERE DRAWN
	FLOOR ELEV.
	SOFFIT ELEV.
	VALVE NUMBER

TYPICAL UNIT NO.

	AIR HANDLER SYSTEM NO. 1
	EQUIPMENT ABBREVIATION
	BUILDING REF.

SMOKE & FIRE WALL DESIGNATIONS

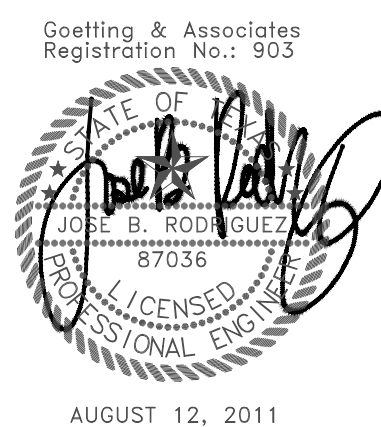
	ONE HOUR SMOKE AND FIRE BARRIER
	TWO HOUR SMOKE AND FIRE BARRIER

GENERAL NOTES:

- ALL PIPING AND DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR SUSPENDED CEILING.
- FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.
- ACCESS PANELS IN SUSPENDED CEILINGS ARE REQUIRED FOR ALL VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC., AND SHALL BE FURNISHED AND INSTALLED UNDER ARCHITECTURAL SPECIFICATIONS.
- TOTAL STATIC PRESSURE NOTED IN SCHEDULES INCLUDES DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC.
- FOR TYPICAL STEAM & WATER PIPING CONNECTIONS TO EQUIPMENT SEE STANDARD DETAILS.
- CEILING DIFFUSER SIZES SHOWN ON SCHEDULES ARE NECK SIZES.
- WATER PIPE CONNECTIONS TO AIR HEATING AND COOLING COILS SHALL BE MADE SO THERE WILL BE COUNTER FLOW BETWEEN WATER AND AIR.
- ALL TEMPERATURE AND HUMIDITY SENSORS SHALL BE PROVIDED WITH ELECTRONIC CONTROLLERS TO PROVIDE PROPER OPERATION OF VALVES.
- REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF CEILING DIFFUSER, REGISTERS AND GRILLES.
- DIMENSIONS INDICATED ON THE DRAWING
- INDICATES THE APPROXIMATE HEIGHT 8'-4" ABOVE FINISHED FLOOR LEVEL TO THE UNDERSIDE OF THE DUCT, OR CENTERLINE OF PIPING. THIS INFORMATION IS PROVIDED AS AN AID TO COORDINATION. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS ON SITE.
- INSULATED PIPEWORK SHALL BE SPACED TO ENSURE THAT FULL THICKNESS INSULATION CAN BE APPLIED TO EACH PIPE.
- ALL FLOOR BRANCHES OFF PIPE RISERS SHALL BE PROVIDED WITH SHUT OFF VALVES AND VALVED DRAIN CONNECTION.

DEMOLITION NOTES:

- THE CONTRACTOR SHALL VERIFY LOCATION AND QUANTITY OF ITEMS TO BE REMOVED, AS NO ALLOWANCE WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS.
- MATERIALS AND ITEMS REMOVED DURING DEMOLITION SHALL BE DISPOSED OF OFF-BASE BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
ITEMS SPECIFICALLY NOTED IN THE SPECIFICATIONS TO BE SALVAGED SHALL BE DELIVERED TO SUCH DESTINATION AS DIRECTED BY THE CONTRACTING OFFICERS REPRESENTATIVE.
- EXISTING AIR DEVICES & DUCTWORK SHALL NOT BE REUSED. REMOVE AIR DEVICES.
- HOLES AND DAMAGED AREAS CAUSED BY REMOVAL OF ANY OF THE ABOVE ITEMS AND WHICH ARE NOT CONCEALED BY NEW CONSTRUCTION SHALL BE REPAIRED TO MATCH EXISTING SURFACES. IN ADDITION, OPENINGS CREATED BY THE REMOVAL OF THESE ITEMS THROUGH FIRE RESISTANCE RATED WALLS OR CEILINGS SHALL BE FIRE STOPPED.



MARK DESCRIPTION		Date	
Revisions:			
CONSULTANTS:		ARCHITECT/ENGINEERS:	
 12042 Blanco Road, Suite 200 San Antonio, Texas 78216-2440 210.530.7000 FAX 210.377.1575		 ARCHITECTURE PLANNING INTERIORS Austin 5121 Bee Cave Road, Suite 203 345 N. Canal St. Suite 701 Austin, Texas 78746 Chicago, IL 60605 T:312-327-4149 T:312-454-9434 F:312-327-7679 F:312-454-9439 coxdesign@austin.txrr.com	
Approved: Assistant Director		Approved: Chief of Staff	
Approved: Service Chief		Approved: Service Chief	
Approved: Chief, Bio-Med		Approved: Chief, EMS	
Approved: Chief, IT		Approved: Chief, M&O	
Approved: Chief, Safety		Approved: Chief	
Approved: Chief, Engineering		Approved: Service Chief	
Approved: Chief, Infection Control		Approved: Chief, Police	
Approved: Chief		Approved: Chief	
Drawing Title		Project Name	
MECHANICAL SYMBOLS & ABBREVIATIONS		REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS	
Location		Building Number	
Audie L. Murphy Memorial Veterans Hospital		1	
San Antonio Texas		Checked	
		JBR	
		Drawn	
		RAC	
		Drawing Number	
		MI-101	
		Dwg. 15 of 57	
		Office of Construction and Facilities Management	
		Department of Veterans Affairs	

three inches = one foot

one and one half inches = one foot

one inch = one foot

three quarters inch = one foot

one half inch = one foot

three eighths inch = one foot

one quarter inch = one foot

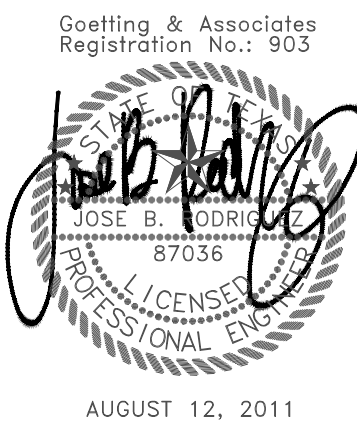
one eighth inch = one foot

VA FORM 08-6231

JOB: VASA_CORR NAME: ml_103 LTSCALE: 1 DATE: 9/18/2013 2:55:01 PM PLOTTED BY: rac XREFS: 0 XRef(s): <NONE>

			AIR DEVICES										(REFER TO PLANS FOR LOCATION, SIZE, AND FLOW)	
SUPPLY					RETURN				EXHAUST					
MARK	TYPE		CONSTRUCTION	NOTES	MARK	TYPE	CONSTRUCTION	NOTES	MARK	TYPE		CONSTRUCTION	NOTES	
S1-1	SQUARE LOUVER FACE SUPPLY DIFFUSER WITH EQUALIZING GRID, OPPOSED BLADE DAMPER AND SURFACE MOUNTING FLAT FRAME. INDIVIDUALLY ADJUSTABLE CURVED AIR DEFLECTORS TO MATCH AIR PATTERN TYPE. PIVOTED OR FIXED PATTERN CONTROLLERS ARE NOT ACCEPTABLE. NECK SIZES AS SCHEDULED.	1 WAY PATTERN	ALUMINUM WHITE FINISH		R1	SQUARE LOUVER FACE RETURN AIR DEVICE WITH OPPOSED BLADE DAMPER AND SURFACE MOUNTING FLAT FRAME. NECK SIZES AS SCHEDULED.	ALUMINUM WHITE FINISH		E1	SQUARE LOUVER FACE EXHAUST AIR DEVICE WITH OPPOSED BLADE DAMPER AND SURFACE MOUNTING FLAT FRAME. NECK SIZES AS SCHEDULED.	ALUMINUM WHITE FINISH			
S1-2		2 WAY PATTERN												
S1-3		3 WAY PATTERN												
S1-4		4 WAY PATTERN												
S1-C		CORNER												
S3-1	SQUARE LOUVER FACE SUPPLY DIFFUSER WITH EQUALIZING GRID, OPPOSED BLADE DAMPER AND SURFACE MOUNTING FLAT FRAME. FACE SIZE 24x24. INDIVIDUALLY ADJUSTABLE CURVED AIR DEFLECTORS TO MATCH AIR PATTERN TYPE. PIVOTED OR FIXED PATTERN CONTROLLERS ARE NOT ACCEPTABLE. NECK SIZES AS SCHEDULED.	1 WAY PATTERN	ALUMINUM WHITE FINISH		R3	SQUARE LOUVER FACE RETURN AIR DEVICE WITH OPPOSED BLADE DAMPER AND SURFACE MOUNTING FLAT FRAME. NECK SIZES AS SCHEDULED.	ALUMINUM WHITE FINISH		E3	SQUARE LOUVER FACE EXHAUST AIR DEVICE WITH OPPOSED BLADE DAMPER AND SURFACE MOUNTING FLAT FRAME. NECK SIZES AS SCHEDULED.	ALUMINUM WHITE FINISH			
S3-2		2 WAY PATTERN												
S3-3		3 WAY PATTERN												
S3-4		4 WAY PATTERN												
S3-C		CORNER												
S4-1	SQUARE LOUVER FACE SUPPLY DIFFUSER WITH EQUALIZING GRID AND OPPOSED BLADE DAMPER FOR 24x12 LAY-IN CEILING GRID. INDIVIDUALLY ADJUSTABLE CURVED AIR DEFLECTORS TO MATCH AIR PATTERN TYPE. PIVOTED OR FIXED PATTERN CONTROLLERS ARE NOT ACCEPTABLE. NECK SIZES AS SCHEDULED.	1 WAY PATTERN	ALUMINUM WHITE FINISH		R4	SQUARE LOUVER FACE RETURN AIR DEVICE WITH OPPOSED BLADE DAMPER FOR 24" X 12" LAY-IN CEILING GRID. NECK SIZES AS SCHEDULED.	ALUMINUM WHITE FINISH		E4	SQUARE LOUVER FACE EXHAUST AIR DEVICE WITH OPPOSED BLADE DAMPER FOR 24" X 12" LAY-IN CEILING GRID. NECK SIZES AS SCHEDULED.	ALUMINUM WHITE FINISH			
S4-2		2 WAY PATTERN												
S4-3		3 WAY PATTERN												
S4-4		4 WAY PATTERN												
S4-C		CORNER												
S5-1	SQUARE LOUVER FACE SUPPLY DIFFUSER WITH EQUALIZING GRID AND OPPOSED BLADE DAMPER FOR 24x24 LAY-IN CEILING GRID. INDIVIDUALLY ADJUSTABLE CURVED AIR DEFLECTORS TO MATCH AIR PATTERN TYPE. PIVOTED OR FIXED PATTERN CONTROLLERS ARE NOT ACCEPTABLE. NECK SIZES AS SCHEDULED.	1 WAY PATTERN	ALUMINUM WHITE FINISH		R5	SQUARE LOUVER FACE RETURN AIR DEVICE WITH OPPOSED BLADE DAMPER FOR 24" X 24" LAY-IN CEILING GRID. NECK SIZES AS SCHEDULED.	ALUMINUM WHITE FINISH		E5	SQUARE LOUVER FACE EXHAUST AIR DEVICE WITH OPPOSED BLADE DAMPER FOR 24" X 24" LAY-IN CEILING GRID. NECK SIZES AS SCHEDULED.	ALUMINUM WHITE FINISH			
S5-2		2 WAY PATTERN												
S5-3		3 WAY PATTERN												
S5-4		4 WAY PATTERN												
S5-C		CORNER												

NOTE: ALL AIR DEVICES WITH EXPOSED SCREWS SHALL HAVE TAMPERPROOF HEADS.



MARK	DESCRIPTION	Date
Revisions:		

CONSULTANTS:



ARCHITECT/ENGINEERS:

COX DESIGN ASSOCIATES

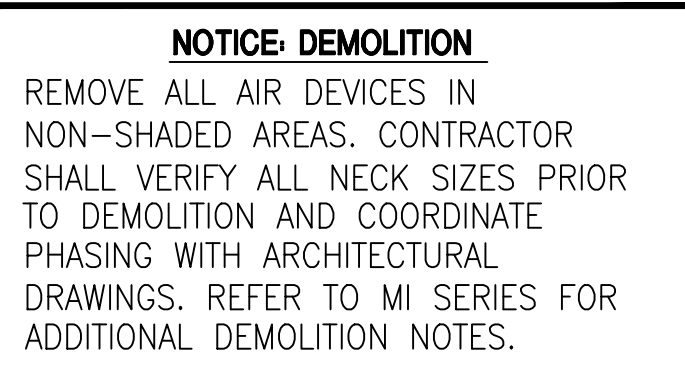
ARCHITECTURE PLANNING INTERIORS
Austin 5121 Bee Cave Road, Suite 203 Austin, Texas 78746 T:312 - 327 - 4149 F:312 - 327 - 7679 coxdesign@austin.tx.com
Chicago 345 N. Canal St. Suite 701 Chicago, IL 60605 T:312 - 454 - 9434 F:312 - 454 - 9439

Approved: Assistant Director	Approved: Chief of Staff	Approved: Chief, Engineering
Approved: Service Chief	Approved: Service Chief	Approved: Service Chief
Approved: Chief, Bio-Med	Approved: Chief, EMS	Approved: Chief, Infection Control
Approved: Chief, IT	Approved: Chief, M&O	Approved: Chief, Police
Approved: Chief, Safety	Approved: Chief	Approved: Chief

Drawing Title
MECHANICAL MECHANICAL SCHEDULES
Location
Audie L. Murphy Memorial Veterans Hospital San Antonio Texas

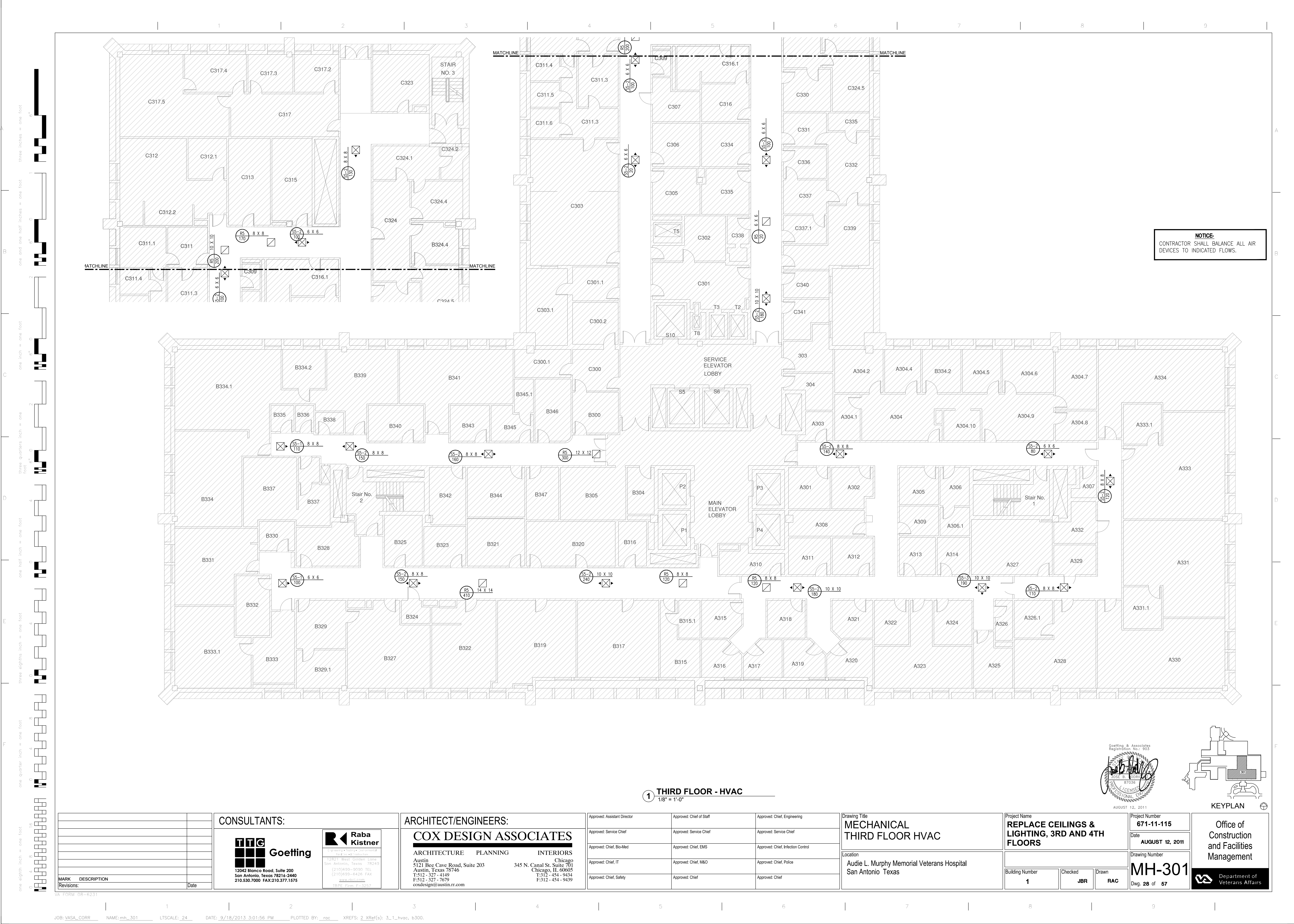
Project Name
REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS
Project Number
671-11-115
Date
AUGUST 12, 2011
Drawing Number
MI-103
Dwg. 17 of 57





KEYPLAN

VA FORM 08-6231					
		1		2	3
JOB: VASA_CORR	NAME: md_401	LTSCALE: 24	DATE: 9/18/2013 2:59:31 PM	PLOTTED BY: roc	XREFS: 2 XRef(s): 4d_1_dhvac, b400.



ELECTRICAL SYMBOLS & ABBREVIATIONS

[SOME SYMBOLS MAY NOT BE USED ON THIS PROJECT]

SYMBOL DESCRIPTION

REWIRING AND DEMOLITION

CLG WALL

- EXISTING CONDUIT IN PLACE - REMOVE EXISTING WIRES AND INSTALL NEW WIRES AS INDICATED.
- EXISTING CONDUIT AND WIRE TO REMAIN
- EXISTING CONDUIT AND WIRE TO BE ABANDONED OR REMOVED AS INDICATED.
- CONNECTION OF NEW CONDUIT TO EXISTING CONDUIT W/ APPROVED TYPE COUPLINGS-- INSTALL NEW WIRES AS INDICATED.
- EXISTING FLUORESCENT FIXTURE TO BE REMOVED
- EXISTING FLUORESCENT FIXTURE TO BE REMOVED
- EXISTING FLUORESCENT FIXTURE DESIGNATION
- EXISTING WALL MOUNTED EXIT LIGHT TO BE REMOVED
- EXISTING CEILING MOUNTED EXIT LIGHT TO BE REMOVED

SYMBOL DESCRIPTION

LIGHTING SYSTEM

CLG.

WALL

- INCANDESCENT, COMPACT FLUORESCENT OR HID FIXTURE. WALL MTD. 7'-6" AFF U.O.N.
- INCANDESCENT, COMPACT FLUORESCENT OR HID FIXTURE ON EMERGENCY POWER
- FLUORESCENT FIXTURE
- FLUORESCENT FIXTURE ON EMERGENCY POWER
- FLUORESCENT FIXTURE
- FLUORESCENT FIXTURE ON EMERGENCY POWER.
- CEILING MOUNTED EXIT LIGHT.
- CEILING MOUNTED EXIT LIGHT W/ DIRECTIONAL ARROWS AS INDICATED ON PLANS.
- BATTERY EMERGENCY LIGHT WITH 2 LAMPHEADS MTD. AT 7'-6" AFF. U.O.N. - FIXTURE TYPE 'AD'
- KEYLESS PORCELAIN LAMP HOLDER WITH WIRE LAMP GUARD. WALL MTD. 7'-6" AFF U.O.N.

GENERAL

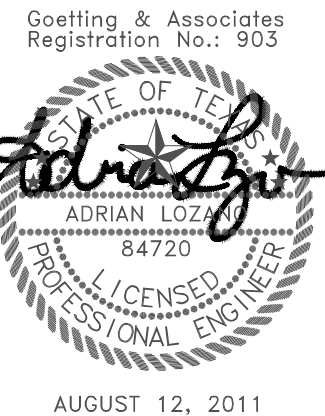
CLG

WALL

- S SINGLE POLE SWITCH WITH SUFFIX a,b,c ETC. INDICATES CONTROL OF FIXTURE(S) WITH SAME DESIGNATION(S).
- S₂ DOUBLE POLE SWITCH
- S₃ THREE-WAY SWITCH
- S₄ FOUR-WAY SWITCH
- S_D INCANDESCENT DIMMER
- S_{DF} FLUORESCENT LAMP DIMMER
- JUNCTION BOX, MTD AT 1'-6" AFF (U.O.N.)
- LIGHTING OR LIGHTING/POWER PANELBOARD
- LIGHT FIXTURE CIRCUIT NUMBER AND TYPE ARE TAGGED AS SHOWN
- BRANCH CIRCUIT RUN BELOW FLOOR OR GRADE U.O.N.
- BRANCH CIRCUIT CONCEALED IN CEILING OR WALL U.O.N.

ABBREV. DESCRIPTION

- ADO AUTOMATIC DOOR OPENER
- A AMPERE
- AF AMPERE FRAME
- AFF ABOVE FINISHED FLOOR
- AT AMPERE TRIP
- ATS AUTOMATIC TRANSFER SWITCH
- BC BARE COPPER
- C CONDUIT
- CB CIRCUIT BREAKER
- CC CONTRACTOR FURNISHED CONTRACTOR INSTALLED
- CKT CIRCUIT
- CCTV CLOSED CIRCUIT T.V.
- CLG CEILING
- DB DIRECT BURIAL
- EC EMPTY CONDUIT
- EG EQUIPMENT GROUND
- EX EXISTING
- EXP, XP EXPANSION JOINT
- EXPLOSION PROOF
- EMERG EMERGENCY
- ELEC ELECTRIC
- EWG ELECTRIC WATER COOLER
- FA FIRE ALARM
- FACP FIRE ALARM CONTROL PANEL
- FCU FAN COIL UNIT
- FIXT FIXTURE
- FLOUR FLUORESCENT
- FSS FUSED SAFETY SWITCH
- FSCP FLAME SAFEGUARD CONTROL CENTER
- GND GROUND
- GEN GENERATOR
- GTB GROUND TERMINAL BOX
- GFI GROUND FAULT INTERRUPTER
- HOA HAND OFF AUTOMATIC
- HH HANDHOLE
- HP HORSEPOWER
- H.P.F. HIGH POWER FACTOR
- HV HIGH VOLTAGE
- INCAND INCANDESCENT
- IPU ISOLATED POWER UNIT
- IPS INTERRUPTIBLE POWER SOURCE
- JB JUNCTION BOX
- LTS LIGHTS
- LTG LIGHTING
- LV LOW VOLTAGE
- MATV MASTER ANTENNA TELEVISION
- MCB MAIN CIRCUIT BREAKER
- MCC MOTOR CONTROL CENTER
- MDP MAIN DISTRIBUTION PANEL
- MLO MAIN LUGS ONLY
- MH MANHOLE
- MT MOUNT
- MTD MOUNTED
- MTG HTG MOUNTING HEIGHT
- P POLE
- PB PULL BOX
- PBPU PREFABRICATED BEDSIDE PATIENT UNIT
- PNL PANEL
- POD POWER OPERATED DAMPER
- PTRV POWER TYPE ROOF VENTILATOR
- PWR POWER
- RECEPT RECEPTACLE
- RGIP REMOTE GROUND INDICATOR PANEL
- RE RESIDENT ENGINEER
- RGS RIGID GALVANIZED STEEL
- PWR POWER
- RECEPT RECEPTACLE
- SIG SIGNAL
- (S.C.) SPLIT CIRUIT HOMERUN
- SS SAFETY SWITCH
- STA STATION
- TEL TELEPHONE
- TV TELEVISION
- VC VETERANS ADMIN. FURNISHED CONTRACTOR INSTALLED
- UH UNIT HEATER
- U.O.N. UNLESS OTHERWISE NOTED
- V VOLTAGE
- VSMC VARIABLE SPEED MOTOR CONTROLLER
- VP VAPOR PROOF
- VV VETERANS ADMIN. FURNISHED VETERANS ADMIN. INSTALLED
- W WIRE
- W/ WITH
- WP WEATHER PROOF
- WT WATER TIGHT
- XFMR TRANSFORMER



		CONSULTANTS:		ARCHITECT/ENGINEERS:		Approved: Assistant Director			Approved: Chief of Staff			Approved: Chief, Engineering			Drawing Title ELECTRICAL SYMBOLS AND ABBREVIATIONS			Project Name REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS			Project Number 671-11-115			Office of Construction and Facilities Management					
						Approved: Service Chief			Approved: Service Chief			Approved: Service Chief						Date AUGUST 12, 2011			Drawing Number								
						Approved: Chief, Bio-Med			Approved: Chief, EMS			Approved: Chief, Infection Control						Location Audie L. Murphy Memorial Veterans Hospital San Antonio Texas			Drawing Number EI-101								
						Approved: Chief, IT			Approved: Chief, M&O			Approved: Chief, Police																	
MARK DESCRIPTION		Date				Approved: Chief, Safety			Approved: Chief			Approved: Chief			Building Number 1			Checked AL			Drawn RAC			Dwg. 30 of 57			Department of Veterans Affairs		
Revisions:																													

ELECTRICAL GENERAL NOTES & DEMOLITION NOTES

GENERAL ELECTRICAL NOTES:

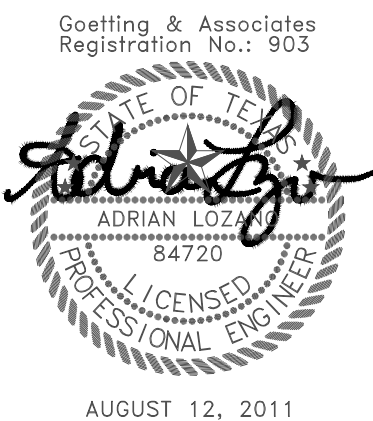
(APPLY TO ALL EL SERIES SHEETS OF ELECTRICAL DRAWINGS)

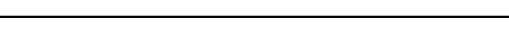

- G1 FINAL LOCATIONS AND ARRANGEMENTS OF ALL LIGHTING FIXTURES AND CEILING TYPES SHALL BE OBTAINED FROM THE ARCHITECTURAL REFLECTED CEILING PLANS AND ARCHITECTURAL SCHEDULES, SECTIONS AND DETAILS.
- G2 EXTEND EXISTING CIRCUIT WIRING TO NEW LIGHT FIXTURES AS SHOWN ON EL SERIES OF ELECTRICAL DRAWINGS. EXISTING CIRCUITS SHALL BE EXTENDED FROM NEAREST CONNECTION NODE (REFER TO DEMOLITION NOTES 2.0 AND 2.1) TO NEW LIGHT FIXTURE WITH NEW CONDUIT AND WIRES. CONTRACTOR SHALL INSTALL NEW WIRING AS SPECIFIED IN DIVISION 26 OF PROJECT SPECIFICATIONS.
- G3 FOR NEW EXIT LIGHTS REPLACING OLD EXIT LIGHTS IN SAME LOCATION, CONNECT NEW EXIT LIGHT TO EXISTING CIRCUIT WIRING. FOR NEW EXIT LIGHTS REPLACING OLD EXIT LIGHTS, BUT RELOCATED TO A NEW LOCATION, EXTEND EXISTING LIFE SAFETY CIRCUIT WIRING TO NEW LOCATION AND CONNECT TO NEW EXIT LIGHT AS REQUIRED. CONTRACTOR SHALL INSTALL NEW WIRING AS SPECIFIED IN DIVISION 26 OF PROJECT SPECIFICATIONS.
- G4 FINAL CONNECTION TO RECESSED FLUORESCENT FIXTURE SHALL BE WITH 1/2" FLEXIBLE CONDUIT WITH NUMBER OF CONDUCTORS AS FOLLOWS:
A. FIXTURES WITH NON-DIMMED BALLAST - 2 #12 (0,N), & 1 #12 GND.
B. FIXTURES WITH DIMMING BALLASTS - 3 #12 (CONTROL,CONTROL,N) & 1 #12 GND.
- G5 PROVIDE NEW DIMMING SWITCHES AT NURSE'S STATIONS AS INDICATED ON DRAWINGS.
- G6 ALL EQUIPMENT AND MATERIALS ARE NEW UNLESS INDICATED AS EXISTING.
- G7 MINIMUM BENDING RADIUS OF CURRENT CARRYING CONDUCTOR SHALL NOT BE LESS THAN MANUFACTURER'S RECOMMENDATIONS, IPCEA 5-66-524 AND NEMA WG-7.
- G8 THE CONTRACTOR SHALL COORDINATE ALL CONDUIT ROUTING AND LIGHT FIXTURE LOCATIONS WITH HVAC, PLUMBING AND SPRINKLER CONTRACTORS TO AVOID CONFLICTS WITH DIFFUSERS, LIGHT FIXTURES, PIPING, SPRINKLER HEADS, ETC.
- G9 CONDUCTORS FOR 120 VOLT BRANCH CIRCUITS OF MORE THAN 50 FEET IN LENGTH SHALL BE A MINIMUM OF NO. 10 AWG. CONDUCTORS FOR 277 VOLT BRANCH CIRCUITS OF MORE THAN 115 FEET IN LENGTH SHALL BE A MINIMUM OF NO. 10 AWG. CONDUCTORS FOR 277 VOLT BRANCH CIRCUITS SERVING EMERGENCY EGRESS LIGHTING AND EXIT LIGHT FIXTURE SHALL BE A MINIMUM OF NO. 10 AWG.
- G10 FIRE ALARM SYSTEM. REFER TO FIRE ALARM PROTECTION DRAWINGS (XX-FPX.XX SERIES) FOR FIRE ALARM SYSTEM.

ELECTRICAL DEMOLITION NOTES:

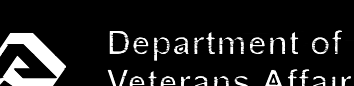
(APPLY TO ALL ED SERIES SHEETS OF ELECTRICAL DRAWINGS)

- 1.0 THE CONTRACTOR SHALL VERIFY LOCATION AND QUANTITY OF ITEMS TO BE REMOVED, AS NO ALLOWANCE WILL BE MADE BECAUSE OF THE CONTRACTOR'S UNFAMILIARITY WITH THESE DETAILS.
- 2.0 CIRCUIT WIRING CONNECTED TO EXISTING LIGHT FIXTURES AND EXIT LIGHTS BEING REMOVED SHALL REMAIN AND BE REUSED FOR RECONNECTION TO NEW FIXTURES AND EXIT LIGHTS.
- 2.1 WIRES OF UNUSED EXISTING LIGHT CIRCUITS THAT REMAIN AFTER DEMOLITION SHALL BE CAPPED AND MARKED WITH PANEL AND CIRCUIT NUMBER AT NEAREST CONNECTION NODE. CAPPED WIRES SHALL BE LEFT PROTECTED WITHIN A J-BOX OR OTHER ENCLOSURE.
- 3.0 ELECTRICAL CIRCUITS WITH A PORTION OF THE LOAD REMOVED SHALL REMAIN ACTIVE AND OPERATIONAL.
- 4.0 HOLES AND DAMAGED AREAS CAUSED BY REMOVAL OF ANY OF THE ABOVE ITEMS AND WHICH ARE NOT CONCEALED BY NEW CONSTRUCTION SHALL BE REPAIRED TO MATCH EXISTING SURFACES. IN ADDITION, OPENINGS CREATED BY THE REMOVAL OF THESE ITEMS THROUGH FIRE RISTANCE RATED WALLS SHALL BE FIRE STOPPED.



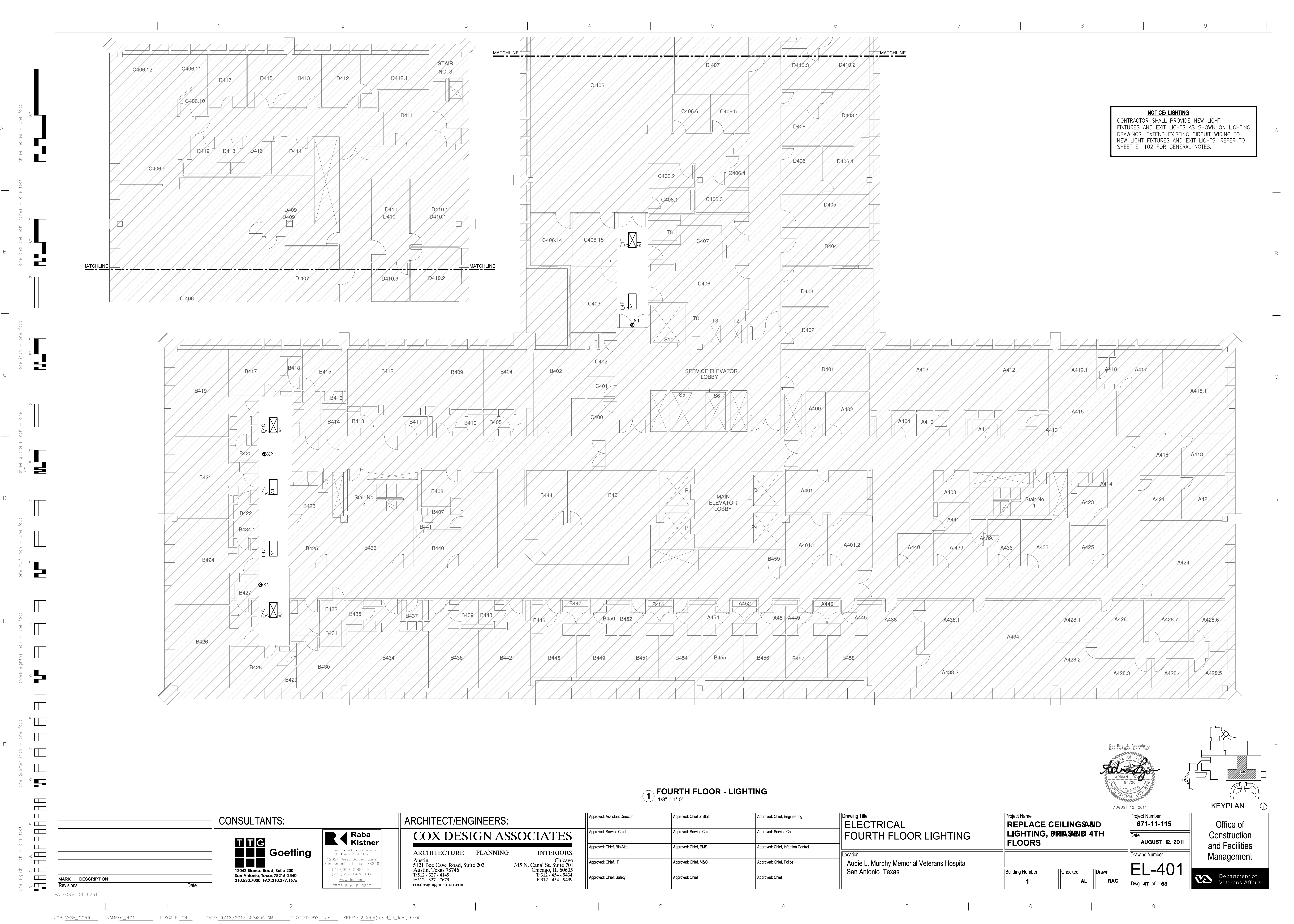
		CONSULTANTS:		ARCHITECT/ENGINEERS:		Approved: Assistant Director	Approved: Chief of Staff	Approved: Chief, Engineering	Drawing Title ELECTRICAL SYMBOLS AND ABBREVIATIONS		Project Name REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS		Project Number 671-11-115	Office of Construction and Facilities Management		
		 Goetting 12042 Blanco Road, Suite 200 San Antonio, Texas 78216-2440 210.530.7000 FAX 210.377.1575		 Raba Kistner ARCHITECTURE PLANNING INTERIORS Austin 5121 Bee Cave Road, Suite 203 Austin, Texas 78746 T-512-327-4149 F-512-327-7679 coxdesign@austin.tx.com		Approved: Service Chief	Approved: Service Chief	Approved: Service Chief			Date AUGUST 12, 2011					
						Approved: Chief, Bio-Med	Approved: Chief, EMS	Approved: Chief, Infection Control					Drawing Number EI-102	Dwg. 31 of 57		
						Approved: Chief, IT	Approved: Chief, M&O	Approved: Chief, Police			Building Number 1		Checked AL			Drawn RAC
						Approved: Chief, Safety	Approved: Chief	Approved: Chief								

V:\FORM 08-0231



AUGUST 12, 2011

- 1 ALL FIXTURE DIMENSIONS ARE NOMINAL.
- 2 ALL BALLASTS FOR FLUORESCENT LAMPS SHALL BE NEMA PREMIUM ELECTRONIC TYPE.
- 3 ELECTRONIC DIMMING BALLASTS SHALL BE AS RECOMMENDED BY MANUFACTURER OF WALL MOUNTED DIMMER.
- 4 PROVIDE (1) TWO-LAMP BALLASTS WITH 1.18 B.F. IN EACH LUMINAIRE.
- 5 PROVIDE (1) TWO-LAMP BALLAST AND (1) ONE-LAMP BALLAST WITH .87 B.F. IN EACH LUMINAIRE FOR DUAL LEVEL SWITCHING SCHEME.
- 6 PROVIDE (2) TWO-LAMP BALLASTS WITH 1.38 B.F. IN EACH LUMINAIRE.
- 7 PROVIDE FLANGE FOR HARD CEILING INSTALLATION.
- 8 ALL EXIT LIGHTS SHALL BE CEILING MOUNTED.
- 9 PROVIDE (1) THREE-LAMP BALLASTS WITH 1.18 B.F. IN EACH LUMINAIRE.




NOTICE - LIGHTING
CONTRACTOR SHALL PROVIDE NEW LIGHT FIXTURES AND EXIT LIGHTS AS SHOWN ON LIGHTING DRAWINGS. EXTEND EXISTING CIRCUIT WIRING TO NEW LIGHT FIXTURES AND EXIT LIGHTS. REFER TO SHEET EL-102 FOR GENERAL NOTES.

1 FOURTH FLOOR - LIGHTING
1/8" = 1'-0"


MARK	DESCRIPTION	Date
Revisions:		

CONSULTANTS:



Goetting

12042 Blanco Road, Suite 200
San Antonio, Texas 78216-2440
210.530.7000 FAX 210.377.1575



Raba Kistner

Engineering • Planning • Construction
12821 West Golden Lane
San Antonio, Texas 78249
(210) 699-9090 TEL
(210) 699-6426 FAX
www.rki.com
TRPE Firm E-3257

ARCHITECT/ENGINEERS:

COX DESIGN ASSOCIATES

ARCHITECTURE PLANNING INTERIORS

Austin 5121 Bee Cave Road, Suite 203 Austin, Texas 78746 T:312 - 327 - 4149 F:312 - 327 - 7679 coxdesign@austin.tx.com

Chicago 345 N. Canal St. Suite 701 Chicago, IL 60605 T:312 - 454 - 9434 F:312 - 454 - 9439

Approved: Assistant Director	Approved: Chief of Staff	Approved: Chief, Engineering
Approved: Service Chief	Approved: Service Chief	Approved: Service Chief
Approved: Chief, Bio-Med	Approved: Chief, EMS	Approved: Chief, Infection Control
Approved: Chief, IT	Approved: Chief, M&O	Approved: Chief, Police
Approved: Chief, Safety	Approved: Chief	Approved: Chief

Drawing Title
**ELECTRICAL
FOURTH FLOOR LIGHTING**

Location
Audie L. Murphy Memorial Veterans Hospital
San Antonio Texas

Project Name
**REPLACE CEILING AND
LIGHTING, BRASIS 4TH
FLOORS**

Project Number
671-11-115

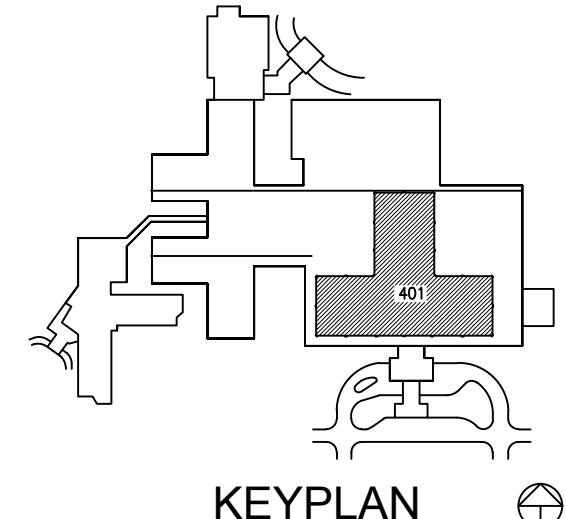
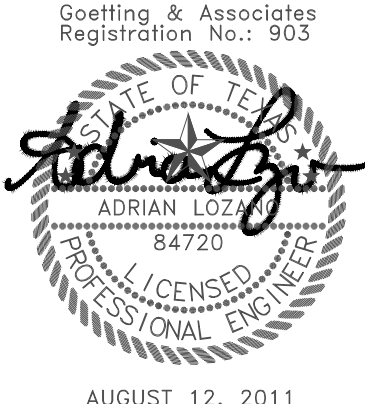
Date
AUGUST 12, 2011

Drawing Number
EL-401

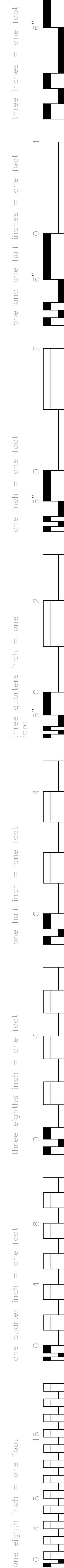
Dwg. 47 of 63

Office of
Construction
and Facilities
Management

Department of
Veterans Affairs



1	2	3	4	5	6	7	8	9
<div><div><div>three inches = one foot</div><div>one and one half inches = one foot</div><div>one inch = one foot</div><div>three quarters inch = one foot</div><div>one half inch = one foot</div><div>three eighths inch = one foot</div><div>one quarter inch = one foot</div><div>one eighth inch = one foot</div></div><div><div><div>6"</div><div>6"</div><div>6"</div><div>6"</div><div>6"</div><div>6"</div><div>6"</div><div>6"</div></div><div><div>1</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div></div><div><div>2</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div></div><div><div>4</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div></div><div><div>6</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div></div><div><div>8</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div></div><div><div>16</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div><div>0</div></div></div></div> <div><div><div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>MARK</div><div>DESCRIPTION</div></div><div>Revisions:</div><div>Date</div></div><div><div>CONSULTANTS:</div><div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>Goetting</div></div><div><div>12042 Blanco Road, Suite 200</div><div>San Antonio, Texas 78216-2440</div><div>210.530.7000 FAX 210.377.1575</div></div></div><div><div><div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div><div>Raba Kistner</div></div><div><div>Engineers • Planners • Environmental Engineers • Interiors</div><div>12821 West Golden Lane</div><div>San Antonio, Texas • 78249</div><div>(210) 699-5090 TEL</div><div>(210) 699-6426 FAX</div><div>www.rksd.com</div><div>TRBE Firm # 3257</div></div></div><div><div>ARCHITECT/ENGINEERS:</div><div><div>COX DESIGN ASSOCIATES</div><div>ARCHITECTURE PLANNING INTERIORS</div><div>Austin 5121 Bee Cave Road, Suite 203 Austin, Texas 78746 T:312 - 327 - 4149 F:312 - 327 - 7679 coxdesign@austin.tx.com</div><div>Chicago 345 N. Canal St. Suite 701 Chicago, IL 60605 T:312 - 454 - 9434 F:312 - 454 - 9439</div></div></div><div><div>Approved: Assistant Director</div><div>Approved: Service Chief</div><div>Approved: Chief, Bio-Med</div><div>Approved: Chief, IT</div><div>Approved: Chief, Safety</div><div>Approved: Chief of Staff</div><div>Approved: Service Chief</div><div>Approved: Chief, EMS</div><div>Approved: Chief, M&O</div><div>Approved: Chief</div><div>Approved: Chief, Engineering</div><div>Approved: Service Chief</div><div>Approved: Chief, Infection Control</div><div>Approved: Chief, Police</div><div>Approved: Chief</div></div><div><div>Drawing Title</div><div>FIRE PROTECTION SYMBOLS & ABBREVIATIONS</div><div>Location</div><div>Audie L. Murphy Memorial Veterans Hospital</div><div>San Antonio Texas</div></div><div><div>Project Name</div><div>REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS</div><div>Building Number</div><div>1</div><div>Checked</div><div>JBR</div><div>Drawn</div><div>RAC</div><div>Project Number</div><div>671-11-115</div><div>Date</div><div>AUGUST 12, 2011</div><div>Drawing Number</div><div>FI-101</div><div>Dwg. 45 of 57</div></div><div><div>Goetting & Associates</div><div>Registration No.: 903</div><div></div><div>AUGUST 12, 2011</div><div>Office of Construction and Facilities Management</div><div>Department of Veterans Affairs</div></div></div><div><div>VA FORM 08-6231</div><div>JOB: VASA_CORR NAME: FI-101 LTSCALE: 1 DATE: 9/18/2013 3:20:52 PM PLOTTED BY: rac XREFS: 0 XRef(s): <NONE></div></div></div></div></div></div>								



Goetting & Associates
Registration No.: 903

Jose B. Rodrigo

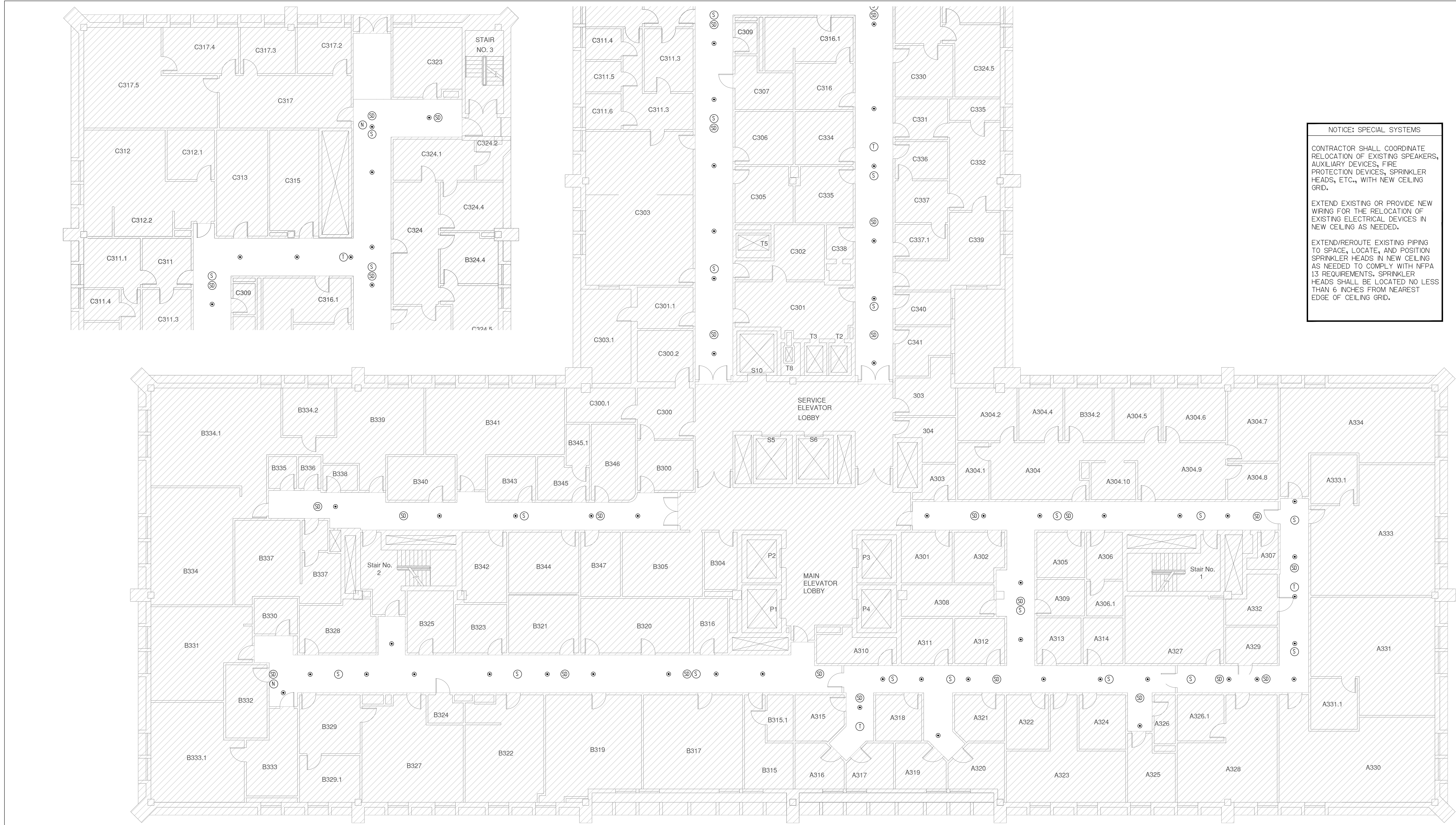
STATE OF TEXAS
JOSE B. RODRIGO
87036
LICENSED PROFESSIONAL ENGINEER

AUGUST 12, 2011



JOB: VASA_CORR NAME: fd_301 LTSCALE: 24 DATE: 9/18/2013 3:22:47 PM PLOTTED BY: rac XREFS: 2 XRef(s): b300, 3d_1_dplum.

one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
three quarters inch = one foot
one inch = one foot
one and one half inch = one foot
two inch = one foot
three inches = one foot



NOTICE: SPECIAL SYSTEMS

CONTRACTOR SHALL COORDINATE RELOCATION OF EXISTING SPEAKERS, AUXILIARY DEVICES, FIRE PROTECTION DEVICES, SPRINKLER HEADS, ETC., WITH NEW CEILING GRID.

EXTEND EXISTING OR PROVIDE NEW WIRING FOR THE RELOCATION OF EXISTING ELECTRICAL DEVICES IN NEW CEILING AS NEEDED.

EXTEND/REROUTE EXISTING PIPING TO SPACE, LOCATE, AND POSITION SPRINKLER HEADS IN NEW CEILING AS NEEDED TO COMPLY WITH NFPA 13 REQUIREMENTS. SPRINKLER HEADS SHALL BE LOCATED NO LESS THAN 6 INCHES FROM NEAREST EDGE OF CEILING GRID.

1 THIRD FLOOR - FIRE PROTECTION
1/8" = 1'-0"

CONSULTANTS: 12042 Blanco Road, Suite 200 San Antonio, Texas 78216-2440 210.530.7000 FAX 210.377.1575		ARCHITECT/ENGINEERS: COX DESIGN ASSOCIATES ARCHITECTURE PLANNING INTERIORS Austin 5121 Bee Cave Road, Suite 203 Austin, Texas 78746 Chicago 345 N. Canal St. Suite 701 Chicago, IL 60605 T: 512 - 327 - 4149 F: 512 - 454 - 9434 F: 512 - 327 - 7679 coxdesign@austin.tx.com		<table border="1"><tr><td>Approved: Assistant Director</td><td>Approved: Chief of Staff</td><td>Approved: Chief, Engineering</td></tr><tr><td>Approved: Service Chief</td><td>Approved: Service Chief</td><td>Approved: Service Chief</td></tr><tr><td>Approved: Chief, Bio-Med</td><td>Approved: Chief, EMS</td><td>Approved: Chief, Infection Control</td></tr><tr><td>Approved: Chief, IT</td><td>Approved: Chief, M&O</td><td>Approved: Chief, Police</td></tr><tr><td>Approved: Chief, Safety</td><td>Approved: Chief</td><td>Approved: Chief</td></tr></table>		Approved: Assistant Director	Approved: Chief of Staff	Approved: Chief, Engineering	Approved: Service Chief	Approved: Service Chief	Approved: Service Chief	Approved: Chief, Bio-Med	Approved: Chief, EMS	Approved: Chief, Infection Control	Approved: Chief, IT	Approved: Chief, M&O	Approved: Chief, Police	Approved: Chief, Safety	Approved: Chief	Approved: Chief	<table border="1"><tr><td colspan="2">Drawing Title FIRE PROTECTION THIRD FLOOR</td></tr><tr><td colspan="2">Location Audie L. Murphy Memorial Veterans Hospital San Antonio Texas</td></tr></table>		Drawing Title FIRE PROTECTION THIRD FLOOR		Location Audie L. Murphy Memorial Veterans Hospital San Antonio Texas		<table border="1"><tr><td colspan="2">Project Name REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS</td></tr><tr><td colspan="2">Project Number 671-11-115</td></tr><tr><td colspan="2">Date AUGUST 12, 2011</td></tr><tr><td colspan="2">Drawing Number FA-301</td></tr><tr><td colspan="2">Dwg. 56 of 57</td></tr></table>		Project Name REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS		Project Number 671-11-115		Date AUGUST 12, 2011		Drawing Number FA-301		Dwg. 56 of 57		<table border="1"><tr><td>Building Number 1</td><td>Checked JBR</td><td>Drawn RAC</td></tr></table>		Building Number 1	Checked JBR	Drawn RAC	<table border="1"><tr><td colspan="2">Office of Construction and Facilities Management</td></tr><tr><td colspan="2">Department of Veterans Affairs</td></tr></table>		Office of Construction and Facilities Management		Department of Veterans Affairs	
Approved: Assistant Director	Approved: Chief of Staff	Approved: Chief, Engineering																																															
Approved: Service Chief	Approved: Service Chief	Approved: Service Chief																																															
Approved: Chief, Bio-Med	Approved: Chief, EMS	Approved: Chief, Infection Control																																															
Approved: Chief, IT	Approved: Chief, M&O	Approved: Chief, Police																																															
Approved: Chief, Safety	Approved: Chief	Approved: Chief																																															
Drawing Title FIRE PROTECTION THIRD FLOOR																																																	
Location Audie L. Murphy Memorial Veterans Hospital San Antonio Texas																																																	
Project Name REPLACE CEILINGS & LIGHTING, 3RD AND 4TH FLOORS																																																	
Project Number 671-11-115																																																	
Date AUGUST 12, 2011																																																	
Drawing Number FA-301																																																	
Dwg. 56 of 57																																																	
Building Number 1	Checked JBR	Drawn RAC																																															
Office of Construction and Facilities Management																																																	
Department of Veterans Affairs																																																	

